

Title (en)  
ALLOY MATERIAL AND PRODUCTION PROCESS THEREFOR

Title (de)  
LEGIERUNGSMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
MATÉRIAU EN ALLIAGE ET PROCÉDÉ DE PRODUCTION ASSOCIÉ

Publication  
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Application  
**EP 20802186 A 20200507**

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Abstract (en)

The present invention discloses an alloy material and a manufacturing process of its bars. The technical solution of the present invention is: an alloy material, wherein it comprises, in mass %:Si, 0.8-1.2%;Fe,0- 0.5%;Cu, 0.15-0.6%;Mn, 0.2-0.8%;Mg, 0.6-0.1%;Cr, 0-0.1%;Zn, 0-0.25%;Ti, 0-0.1%; the balance is Al<sub>#</sub>The Si content is 1.11%. The Mn content is 0.69%.A manufacturing process of an alloy material, wherein it comprises the following steps:(1) Weighing the raw material of each component by mass percentage;(2) Placing the raw material in a melting furnace and smelt it into an alloy liquid, until the temperature of the alloy liquid reaches 705-750°C, keeping for 45-60 minutes;(3) After the alloy liquid temperature falls to 520-580°C, add refining agent, heat up to 670-710°C, and carry out composition inspection;(4). After the alloy liquid is cooled down to 650-660°C by holding, it is poured into molds where the bars are formed by cooling. According to the solution provided by the invention, the alloy has high tensile strength and yield strength.

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